

**INFORMATION DISCLOSURE
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On substitute for form 1449A/PTO
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Sheet 1 of 3

Serial No. * * *
Filing Date: October 11, 2001
First Named Inventor: Manoneet Singh
Group Art Unit: * * *
Examiner: * * *
Docket ID: RAD295

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U. S. PATENT DOCUMENTS

<u>Examiner Initials</u>	<u>Patent No.</u>	<u>Patentee</u>	<u>Date of Publication</u>	<u>Class/ Subclass</u>
_____	5228062	Bingham	Jul. 13, 1993	375/97
_____	5602835	Seki et al.	Feb. 11, 1997	370/206

FOREIGN PATENT DOCUMENTS

<u>Examiner Initials</u>	<u>Office</u>	<u>Number</u>	<u>Patentee or Applicant</u>	<u>Date of Publication</u>
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OTHER PRIOR ART- NON PATENT LITERATURE DOCUMENTS

Include name of author (in CAPITAL LETTERS) title of article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.

_____ Digital Video Broadcasting (DVB), "Framing structure, channel coding and modulation for digital terrestrial television", European Standard Telecommunications series, ETSI EN 300 744 V1.4.1, (2001-01), pp. 24-28, published at Sophia Antipolis Cedex, France, by European Broadcasting Union.

_____ IEEE 802.16ab-01/01r1, "Air Interface for Fixed Broadband Wireless Access Systems Part A: Systems between 2 and 11 GHz", July 2001, pp. 164-168, published at New York, New York, by Institute of Electrical and Electronic Engineers, Inc.

_____ P. H. MOOSE, "A Technique for Orthogonal Frequency Division Multiplexing Frequency Offset Correction", IEEE Transactions on Communications, vol. 42, no. 10, pp. 2908-2914, October 1994.

_____ T. M. SCHMIDL and D. C. COX, "Robust Frequency and Timing Synchronization for OFDM", IEEE Transactions on Communications, vol. 45, no. 12, pp. 1613-1621, December 1997.

_____ JAN-JAAP VAN DE BEEK, MAGNUS SANDELL and PER OLA BORJESSON, "ML Estimation of Timing and Frequency Offset in OFDM Systems", IEEE Transactions on Signal Processing, Vol. 45, no. 7, pp. 1800-1805, July 1997.

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_____ T. KELLER and L. HANZO, " Orthogonal Frequency Division Multiplex Synchronisation Techniques for Wireless Local Area Networks" , Proceedings for PIMRC, Taiwan, pp. 963-967, October 1996.

_____ M. JULIA FERNANDEZ-GETINO GARCIA, SANTIAGO ZAZO and JOSE M. PAEZ-BORRALLLO, "Tracking of Time-Frequency Misalignments in 2D Pilot-Symbol-Aided Coherent OFDM Systems", Proceedings of IEEE Vehicular Technology Conference VTC-2000, PP. 1704-1709 year 2000.

_____ STEFAN A. FECHTEL, "OFDM Carrier and Sampling Frequency Synchronization and its Performance on Stationary and Mobile Channels", IEEE Transactions on Consumer Electronics, vol. 46, no. 3, pp. 438-441, August 2000.

_____ TAKASHI WAKUTSU AND MUTSUMU SERIZAWA, "A Carrier Frequency Offset and Timing Offset Detection Scheme for OFDM Systems Utilizing Pilot Sub-Carriers", IEICE Transactions on Communications, vol. E83-B, no. 8, pp. 1854-1863, August 2000.

_____ JAMES K. CAVERS, "An Analysis of Pilot Symbol Assisted Modulation for Rayleigh Fading Channels," IEEE Transactions on Vehicle Technology, vol. 40, no. 4, pp. 686-693, November 1991.

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